

**REMARKS****Summary of the Office Action**

Claims 18-25 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Claims 2-4 and 18-25 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

Claims 2-4 and 18-25 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Schmidt et al. (Biochimica et Biophysica Acta. 1987, Vol. 891:22-27) (hereinafter “Schmidt”).

**Summary of the Response to the Office Action**

Applicants have amended independent claim 2 to differently describe embodiments of the disclosure of the instant application and/or to improve the form of the claim. Accordingly, claims 1-25 are currently pending with claims 2-4 and 18-25 currently under consideration.

**Rejection under 35 U.S.C. § 112, First Paragraph**

Claims 18-25 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The Examiner alleges that neither the specification nor the originally presented claims provides support for the features (a) to (f) described at pages 4-5 of the Office Action. Applicants respectfully traverse these assertions by the Examiner as clearly being factually incorrect for at least the following reasons.

Applicants respectfully submit that claims 18-25 are claims that are based on originally filed claims 5-12. In the originally filed claims, claims 5-12 were dependent on two independent

claims, namely, independent claim 1 and independent claim 2. As a result, these claims 5-12 were amended in the Preliminary Amendment filed on June 16, 2006 into claims that are dependent only on independent claim 1. In the same Preliminary Amendment document, claims 18-25 were added to correspond to original claims 5-12, but to be dependent only on independent claim 2.

Claim 18 (feature (a) described in the Office Action) is based on original claim 5, and the feature of this claim is described, for example, in paragraph [0014] of the specification of the instant application.

Claim 19 (feature (b) described in the Office Action) is based on original claim 6, and the feature of this claim is described, for example, in paragraph [0015] of the specification of the instant application.

Claim 20 (feature (c) described in the Office Action) is based on original claim 7, and the feature of this claim is described, for example, in paragraph [0016] of the specification of the instant application.

Claim 21 (feature (d) described in the Office Action) is based on original claim 8, and the feature of this claim is described, for example, in paragraph [0017] of the specification of the instant application.

Claim 22 (feature (e) described in the Office Action) is based on original claim 9, and the feature of this claim is described, for example, in paragraph [0018] of the specification of the instant application.

Claim 23 (feature (f) described in the Office Action) is based on original claim 10, and the feature of this claim is described, for example, in paragraph [0019] of the specification of the instant application.

Claim 24 is based on original claim 11, and the feature of this claim is described, for example, in paragraph [0020] of the specification of the instant application.

Claim 25 is based on original claim 12, and the feature of this claim is described, for example, in paragraph [0020] of the specification of the instant application.

Accordingly, Applicants respectfully traverse the rejection under 35 U.S.C. 112, first paragraph for at least the foregoing reasons. Accordingly, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. § 112, first paragraph.

**Rejection under 35 U.S.C. § 112, Second Paragraph**

Claims 2-4 and 18-25 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, the Examiner alleges that there “is no correlation step which correlates assaying a toxic substance present in an aqueous solution sample to be tested with the assay values are temporal variations of the light amounts of delayed fluorescence acquired in the first step and the second step, and the comparison value is a value obtained by determining a difference of the temporal variations.” Therefore, the Examiner asserts that “the goal of the preamble is not commensurate with the steps of the method that are drawn to a toxic substance assay method.”

In response to this rejection, Applicants have amended independent claim 2 of the instant application to differently describe embodiments of the disclosure of the instant application and/or to improve the form of the claim. Applicants respectfully submit newly-amended independent claim 2 of the instant application describes an advantageous combination of features of the toxic substance assay method of the present invention that include:

(1) the comparison value includes Curve values obtained by determining differences of the temporal variations of the light amounts of delayed fluorescence respectively obtained from the test measurement solution and the comparison measurement solution; and

(2) in the third step, the toxic substance present in the aqueous solution sample is assayed based on a time range in which a variation in the Curve values appears and a positive or negative direction of the variation.

For the above feature (1), Applicants respectfully submit that there is a description in paragraph [0063] of the specification that, as the comparison value, "Curve values, obtained by determining differences of the temporal variations of the light amounts of delayed fluorescence respectively obtained from the test measurement solution and the standard measurement solution, are used," and by "evaluating these comparison values, the sensitivity of the photosynthetic sample to the biological growth inhibition factors can be evaluated appropriately."

For the feature (2), Applicants respectfully submit that there is a description in paragraph [0176] of the specification that "even when clear characteristic points are not present in the delayed fluorescence decay curve, the effects of toxic substances can be assayed by computing the Curve values," and because "the time range in which variations appear and the positive or negative direction of variations differ according to toxic substance, such Curve values are useful for specifying the types, actions, etc., of the detected toxic substances."

In newly-amended independent claim 2 of the instant application, Applicants respectfully submit that the method of assaying the toxic substance present in the aqueous solution sample to be tested is clearly described. As a result, Applicants respectfully submit that the goal of the preamble is fully commensurate with the steps of the method that are drawn to a toxic substance assay method.

Accordingly, Applicants traverse the rejection under 35 U.S.C. 112, second paragraph for at least the foregoing reasons. Accordingly, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. § 112, second paragraph.

**Rejections under 35 U.S.C. § 102(b)**

Claims 2-4 and 18-25 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Schmidt. Applicants have amended independent claim 2 to differently describe embodiments of the disclosure of the instant application and/or to improve the form of the claim. To the extent that these rejections might be deemed to still apply to the claims as newly-amended, they are respectfully traversed for at least the following reasons.

Applicants respectfully submit that newly-amended independent claim 2 of the instant application describes an advantageous combination of features that include a third step in which the comparison value includes the Curve values, and the toxic substance present in the aqueous solution sample is assayed based on a time range in which a variation in the Curve values appears and a positive or negative direction of the variation. Applicants respectfully submit that at least these features of the specific method for assaying the toxic substance of the instant application's disclosed invention is neither disclosed, nor even suggested, in the disclosure of Schmidt.

Accordingly, Applicants respectfully assert that the rejections under 35 U.S.C. § 102(b) should be withdrawn because Schmidt does not teach or suggest each feature of independent claim 2 of the instant application. As pointed out in MPEP § 2131, "[t]o anticipate a claim, the reference must teach every element of the claim." Thus, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a

single prior art reference. Verdegaal Bros. v. Union Oil Co. Of California, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987)."

Furthermore, Applicants respectfully assert that the dependent claims 3, 4 and 18-25 are allowable at least because of their dependence from independent claim 2, and the reasons discussed previously.

### **Priority Issues**

At page 2, section 2 of the Office Action, the Examiner notes that a reference to "the prior application" must be inserted as the first sentence of the specification of this application or in an application data sheet if Applicants intend to rely on the filing date of the prior application under 35 U.S.C. 119(e), 120, 121, or 365(c). The Examiner refers to 37 C.F.R. § 1.78(a) in this regard.

In response, Applicants respectfully submit that the instant application does claim priority to prior Japanese Patent Application No. 2003-421948, filed in Japan on December 19, 2003. However, the priority to this Japanese application is claimed under 35 U.S.C. § 119(a)-(d), not under "35 U.S.C. 119(e), 120, 121, or 365(c)" as set forth by the Examiner at page 2, section 2 of the Office Action. Accordingly, it appears that the Examiner has applied an incorrect form paragraph in this regard at page 2, section 2 of the Office Action. Applicants are not aware of any requirement for amending the first paragraph of the instant application's specification with regard to a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

A claim for foreign priority benefits was included in the executed Declaration that was previously filed in this application. Also, a certified copy of the subject Japanese patent application was filed in this application. The Examiner acknowledged receipt of both this claim

for foreign priority as well as the receipt of the certified copy of the subject Japanese patent application by checking the appropriate boxes in section 12 of page 1 (PTOL-326) of the Office Action dated October 5, 2009.

Accordingly, Applicants believe that all requirements associated with the claim for foreign priority under 35 U.S.C. § 119(a)-(d) have been fully complied with in the instant application. To the extent that any of Applicants' understandings in these regards are incorrect, the Examiner is respectfully requested to provide specific clarifications in the next Office Communication.

### CONCLUSION

In view of the foregoing, Applicants submit that the pending claims are in condition for allowance, and respectfully request reconsideration and timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution. A favorable action is awaited.

EXCEPT for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. § 1.16 and 1.17 which may be required, including

any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0573.

This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF**

**TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

**DRINKER BIDDLE & REATH LLP**



By:

Paul A. Fournier

Reg. No. 41,023

Dated: March 30, 2010

**Customer No. 055694**

**DRINKER BIDDLE & REATH LLP**

1500 K Street, N.W., Suite 1100

Washington, DC 20005-1209

Tel.: (202) 842-8800

Fax: (202) 842-8465